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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,712	10/22/2003	Shlomo Ovadia	42.P17541	6853

7590 11/14/2006
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EXAMINER

SEDIGHIAN, REZA

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/691,712

Applicant(s)

OVADIA ET AL.

Examiner

M. R. Sedighian

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 13-15, 25-27, 29 is/are rejected.
- 7) ☒ Claim(s) 4-12, 16-24 and 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/18/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2613

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 13-15, 25-27, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Mishra (US Patent Application Publication No: 2002/0186433 A1).

Regarding claim 1, Mishra teaches a method comprising: dynamically discovering an available light path route (page 2, paragraph 0026) comprising a concatenation of a plurality of light path segments connected via respective nodes a long a route spanning from a source edge node to a destination edge node (page 2, paragraphs 0027, 0028 and 100, fig. 1 and 300, fig. 3) and including at least one switching node (page 2, paragraph 0029 and page 3, paragraph 0040 and 214, fig. 2) in an optical switched network (page 2, paragraph 0030); and reserving network resources to enable transmission of data between the source and destination nodes along the light path route during a scheduled time slot (page 4, paragraph 0053 and 600, fig. 6), wherein reservation of network resources causes the at least one switching node and the source and destination edge nodes to be configured so as to form a virtual optical-switched circuit between the source and destination edge nodes during the scheduled time slot (page 4, paragraphs 0052, 0058 and 800, fig. 8).

Regarding claim 2, Mishra teaches the optical switched network comprises a photonic burst switched network (page 2, paragraph 0029 and page 4, paragraph 0051).

Art Unit: 2613

Regarding claim 3, Mishra teaches the optical burst switched network comprises a wavelength-division multiplexed (WDM) PBS network (page 2, paragraph 0027).

Regarding claim 13, Mishra teaches a partial use of a node resource may be reserved (page 4, paragraph 0052).

Regarding claim 14, Mishra teaches the partial use comprises a bandwidth percentage use of a light path segment (page 3, paragraphs 0041, 0042 and pages 4-5, paragraph 0058).

Regarding claims 15 and 27, Mishra teaches a switching node apparatus for use in an optical switched network (200, fig. 2), comprising: optical switch fabric (214, fig. 2) having at least one input fiber port and at least one output fiber port (page 3, paragraph 0036); and a control unit operatively coupled to the optical switch fabric including at least one processor (pages 2-3, paragraphs 0032, 0036) and a first storage device operatively coupled to the processor containing machine-executable instructions (page 5, paragraph 0059) which when executed by the processor perform operations including: generating a routing tree table identifying applicable routes to route data between the switching node apparatus when implemented as a first node in an optical switched network and other nodes in the optical switched network (page 3, paragraph 0037 and 210, fig. 2); maintaining a resource reservation table including reservations of switching node apparatus resources for scheduled time slots (page 3, paragraphs 0038, 0039 and 212, fig. 2); receiving a lightpath resource reservation request from a second node which includes data identifying an address of a destination node and a scheduled time slot for which resources for the switching node apparatus are requested to be reserved for a lightpath traversing a plurality of nodes from a source node to the destination node (page 4, paragraphs 0049, 0050); dynamically determining a third node comprising a next hop node for

Art Unit: 2613

the lightpath based on routing information contained in the routing tree table and resource availability determined from the resource reservation table (page 4, paragraphs 0050, 0052); and forwarding the lightpath resource reservation request to the next hop node (page 4, paragraph 0053 and figs. 3, 5); and reserving network resources corresponding to the lightpath resource reservation request to support routing of data through the switching node apparatus for the scheduled time slot (page 4, paragraph 0053 and fig. 6).

Regarding claim 25, Mishra teaches the processor is network processor (page 2, paragraph 0028 and pages 3-4, paragraph 0046).

Regarding claim 26, Mishra teaches the processor further includes a control processor (page 2, paragraph 0023).

Regarding claim 29, Mishra teaches execution of instructions determines the next hop node by performing operations including: a) selecting a route from the switching apparatus to the destination node (page 4, paragraph 0053 and 602, fig. 6); b) determining if sufficient network resources are available to transmit data between the switching node apparatus and a first hop node in the route that is selected during the scheduled time slot (page 4, paragraph 0053 and 604, fig. 6); c) selecting the first hop node as the next hop node if sufficient network resources are available (page 4, paragraph 0053, lines 7-9 and 606, fig. 6); d) otherwise selecting a new route from the switching apparatus to the destination node (pages 4-5, paragraph 0058); and repeating operations (b) - (d) until it is determined that a first hop node has sufficient network resources available (page 5, paragraph 0058, lines 10-13).


Art Unit: 2613

3. Claims 4-12, 16-24, and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034. The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


M. R. SEDIGHIAN
PRIMARY EXAMINER